

Infection Prevention and Control (IPC) for Maternal Newborn and Child Health services during COVID-



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1. *Introduction to Infection Prevention and Control (IPC)*
2. *IPC recommendations for COVID-19 in the context of MNCH services*



Introduction to IPC

Importance of Infection Prevention and Control



Protecting yourself

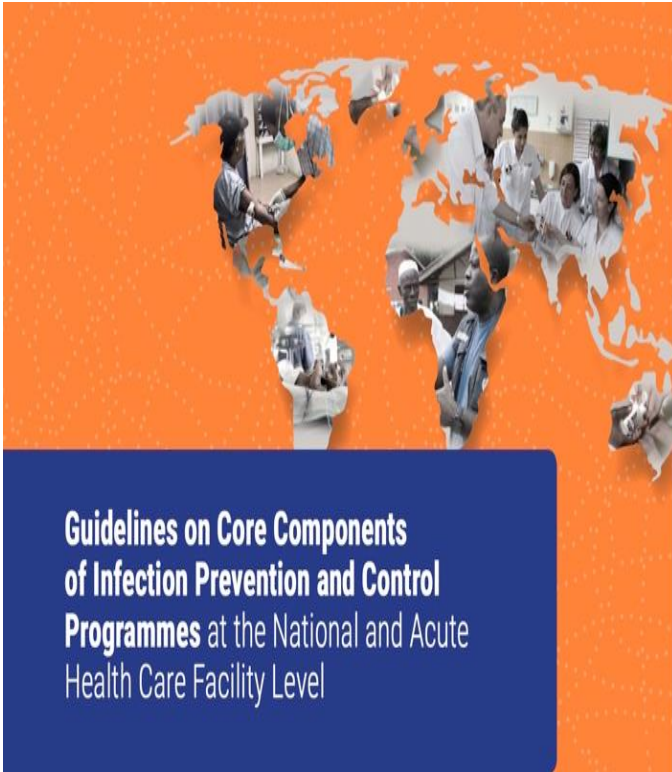


Protecting your patients



Protecting your family & community

IPC Core Components



IPC core components include:

- IPC programmes should be implemented at national and health care facility levels;
- National IPC focal point and at each facility;
- Training in IPC measures; including personal protective equipment (PPE) and understanding of modes of transmission of diseases

IPC should be an ongoing activity undertaken by all health workers

IPC: Standard Precautions for all health care settings

1. Hand hygiene
2. Respiratory hygiene (etiquette)
3. PPE according to the **risk assessment**
4. Safe injection practices, sharps management and injury prevention
5. Safe handling, cleaning and disinfection of patient care equipment
6. Surface and environmental cleaning
7. Safe handling and cleaning of soiled linen
8. Waste management

Protect others from getting sick

When coughing and sneezing
cover mouth and nose with
flexed elbow or tissue



Throw tissue into closed bin
immediately after use

Clean hands with alcohol-based
hand rub or soap and water
after coughing or sneezing and
when caring for the sick



Wash your hands

Wash your hands with
soap and running water
when hands are visibly
dirty

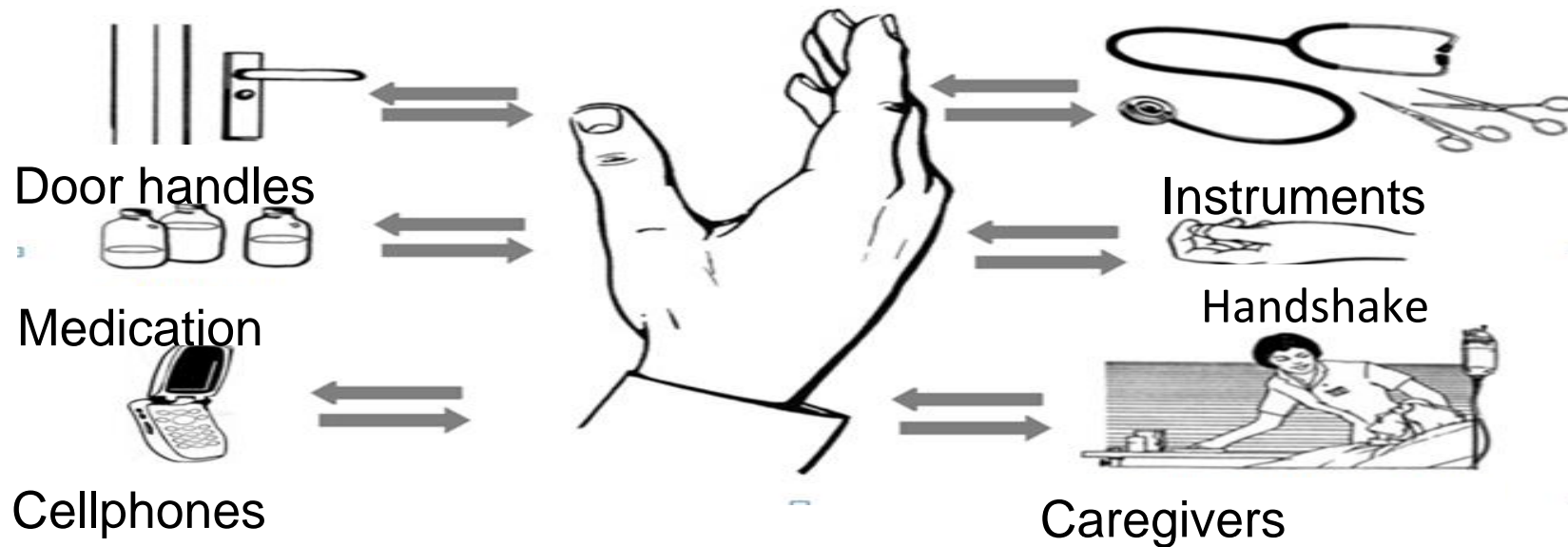


If your hands are not
visibly dirty,
frequently clean them
by using alcohol-based
hand rub or soap and
water



1. Hand hygiene: Why is important?

- Practicing good hand hygiene is the best way to prevent the spread of germs in the health care setting and community
- Our hands are our main tool for work as health care workers- and they are the key link in the chain of transmission



2. Respiratory Hygiene

WHY?

Good respiratory hygiene/cough etiquette can reduce the spread of microorganisms into the environment that cause respiratory infections.

**** For health workers – do not come to work if experiencing respiratory symptoms!****

HOW?

- Cover the nose and mouth when sneezing and/or coughing with a tissue or your sleeve/inside of your elbow, if no tissue is available
- Perform hand hygiene afterwards with alcohol based hand rub products or water and soap if hands are visibly soiled
- Stay away from others when ill (particularly for health workers to avoid coming to work when ill)
- Avoid introductory kissing or shaking hands when ill
- Avoid close contact with people who exhibit symptoms
- Wear a medical mask if having respiratory symptoms



3. Personal Protective Equipment (PPE) items:

Gown



Body

Gloves



Hands

Face Mask



**Nose +
mouth**

**Respirator
N95**



Nose + mouth

Face shield



Eyes + nose + mouth

Goggle



Eyes

The type of PPE used will vary based on the health service provided, the individual risk-assessment, and additional transmission-based precautions needed.

3. PPE according to Risk Assessment



Risk assessment: risk of exposure and extent of contact anticipated with blood, body fluids, respiratory droplets, and/or open skin

- Select which PPE items to wear based on this assessment
- Perform hand hygiene according to the WHO "5 Moments"
- Should be done for each patient, each time

Make this routine!

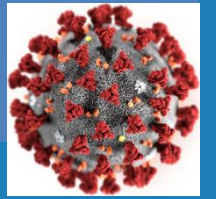
IPC recommendations for COVID-19 in the context of MNCH services



**World Health
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Modes of transmission of COVID-19



Droplet

- Respiratory droplets (particles $>5-10\ \mu\text{m}$ in diameter)
- generated when an infected person coughs or sneezes
- Any person who is in close contact with someone who has respiratory symptoms (sneezing, coughing) is at risk of being exposed to potentially infective respiratory droplets

Contact

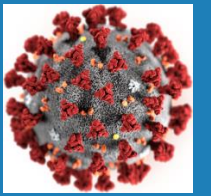
- *Direct contact* with infected people through touching
- *Indirect contact* with surfaces in the immediate environment; droplets may land on surfaces, thus, the immediate environment of an infected individual can serve as a source of transmission if someone touches it and then their face

Airborne

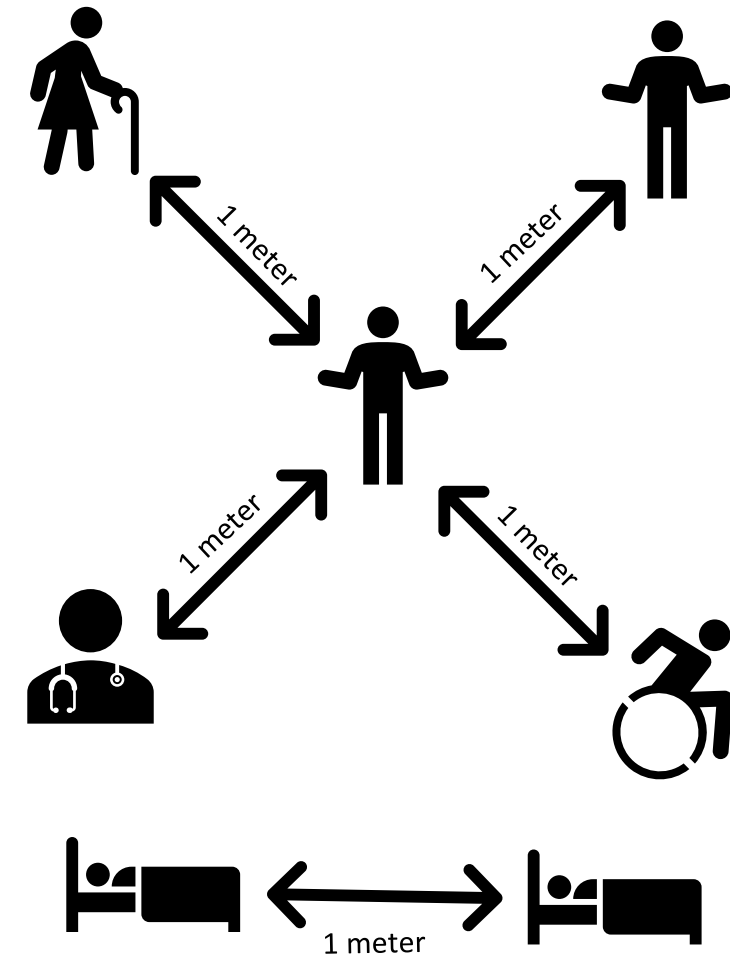
- Only aerosol-generating procedures in health settings
- tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy



How to set up a safe MNCH service delivery site



- **Built environment:** Pick a well **ventilated area** or outdoor space where you can ensure one-way flow and physical distance
- Avoid crowded **waiting areas**, limit persons accompanying the person needing vaccination, and ensure a 1metre distance between others or between chairs
- Ensure the availability of **hand sanitizer** or a hand washing station is available at the entrance of the health facility
- Perform **screening** of persons presenting respiratory symptoms before admission to the vaccination posts to prevent the spread of COVID-19 infection
- Ensure adequate space for the **sideways positioning** of the recipient and caretaker so they are not face-to-face to the



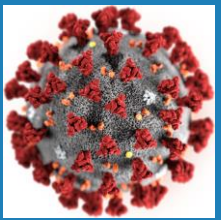
Screening

- Intended for the early recognition of possible COVID-19 cases to determine protection measures
- Ensure one way direction (flow) of recipients throughout process
- Separation: at least 1 meter maintained between all patients
- Signage posted for recipients to report symptoms
- Masks are required for screening by health workers unless 1 meter physical distance can be maintained between the screener and recipient



Physical distancing during routine immunization. Malawi, May 2020

Risk assessment recommendations for COVID-19



Program leaders

(National or subnational level)

1. Confirm the local COVID-19 transmission scenario
2. Consider health service and delivery strategy to be used and make a risk assessment
 - Define and recommend which PPE items which should be based on this assessment; assure appropriate IPC training and supply of necessary equipment

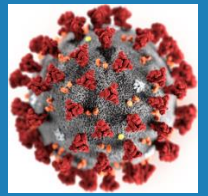


Individual Health Worker

(Fixed site/outreach/campaign site)

1. Adhere to national guidance and protocols for IPC measures
2. Perform a risk assessment before every patient interaction
 - Based on this personal risk assessment of exposure to COVID-19, select which additional personal protective equipment items to wear.

Settings: Recommended IPC Activities and PPE for Health Workers

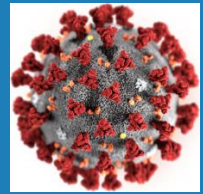







COVID-19 Transmission setting	IPC activities in any setting (fixed, outreach, mass campaign)	Personal Protective Equipment
No Cases	<ul style="list-style-type: none"> • Adhere to national IPC protocols • Always apply standard precautions • Screening recommended in all settings • Maintain 1 meter distance between vaccinators and accompanying members/family members as much as possible • Ensure that the recipient and caretaker is positioned sideways to the vaccinator (not face to face) • Hand hygiene between recipients • Disinfection of surfaces after every patient (if applicable) 	<ul style="list-style-type: none"> • Adhere to national IPC protocols • Additional PPE indicated by the risk assessment per recipient
Sporadic or Cluster cases		<ul style="list-style-type: none"> • Adhere to national IPC protocols • Medical masks can be considered a requirement for health workers
Community transmission		<ul style="list-style-type: none"> • Adhere to national IPC protocols • Health workers should wear medical masks throughout the session

Community transmission: PPE during community service delivery

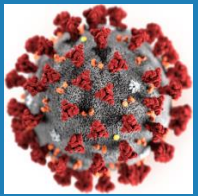
Home visit (for example, for antenatal or postnatal care, or care for a person with tuberculosis, HIV or another chronic condition)	Outreach activities and campaigns	Community case management of acute illness in children
<ul style="list-style-type: none"> • If feasible, conduct home visits outside in a well-ventilated space and keep a distance of at least 1m • Perform hand hygiene frequently and while providing care, according to WHO's recommendations on the 5 moments for hand hygiene. • Consider wearing a medical mask when in direct contact or when a distance of at least 1 m cannot be maintained - Wear gloves only if exposure is expected to blood, body fluids, secretions, excretions, mucous membranes or broken skin. 	<p>When no direct contact is involved (for example, during the distribution of insecticide-treated nets)</p> <ul style="list-style-type: none"> • Maintain distance of at least 1 m • No screening required. • No PPE required. • Perform hand hygiene frequently. <p>When direct contact is involved (for example, delivering vaccinations)</p> <ul style="list-style-type: none"> • Perform hand hygiene between each patient. • Consider wearing a medical mask during close contact 	<p>Perform hand hygiene according to WHO's recommendations on the 5 moments for hand hygiene.</p> <ul style="list-style-type: none"> • PPE needs depend on the outcome of screening. • If the patient is not suspected to have COVID-19: wear a medical mask and gloves for a malaria rapid diagnostic test, as per standard protocol. • If the patient is suspected to have COVID-19: wear full PPE (medical mask, eye protection, gloves, gown).

Risk assessment: Use of PPE



Hand hygiene		Practice between each patient (before and after contact).
PPE item		When to use
Masks		In areas with COVID-19 community transmission, health workers should wear a medical mask throughout the immunization session. The mask can be replaced when damaged, contaminated or damp.
Eye protection		Use if risk of splashes from droplets or body fluids are anticipated into the eyes, as indicated by risk assessment conducted before every interaction with patients
Gloves		Gown or gloves should be discarded after single use.
Gown		

PPE required when managing suspect COVID-19 cases



Droplet & Contact precautions for suspected or confirmed COVID-19 cases

1. hand hygiene
2. gown
3. eye protection (face shield or goggles)
4. medical mask
5. gloves

1 Perform hand hygiene

Alcohol based handrub | **Water and soap**
Rub hands for 20–30 seconds. | Wash hands for 40–60 seconds.



2 Put on the gown



3 Eye protection

Put on goggles or face shield.



4 Put on the mask

Medical mask
— or —
Respirator mask (N95, FFP2, FFP3, or equivalent).
Only use if performing aerosol generating procedures.

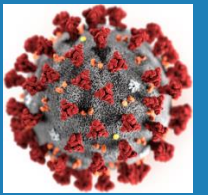


5 Put on gloves

Ensure gloves are placed over the cuff of the gown.



Recommended IPC Kit for Outreach / Campaign Kit



In addition to vaccination supplies, health workers are advised to carry IPC kits with them, as a precaution. This kit contains PPE that may be required based on individual risk assessment.

This kit should at minimum contain:

1. **Alcohol based hand rub**
2. **Medical mask** (bring several for replacement needs)
3. **Eye protection** (in case there is a need)
4. **Gloves** (in case there is a need)
5. **Gowns** (in case there is a need)
6. **Garbage bag**



Community Engagement

- Risk communication
 - Ensure safety measures are communicated to the community
 - Messages need to be adapted to MNCH service delivery changes in the outbreak context
- Community engagement
 - Allocate time to engage community leaders and mobilizers
 - Train community mobilizers in IPC measures



Physical distancing, Measles Campaign. DRC March 2020

Infection prevention and control during health care when COVID-19 is suspected



Interim guidance
19 March 2020



[https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)

Rational use of personal protective equipment for coronavirus disease (COVID-19) and considerations during severe shortages

Interim guidance
6 April 2020





https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf

Advice on the use of masks in the context of COVID-19

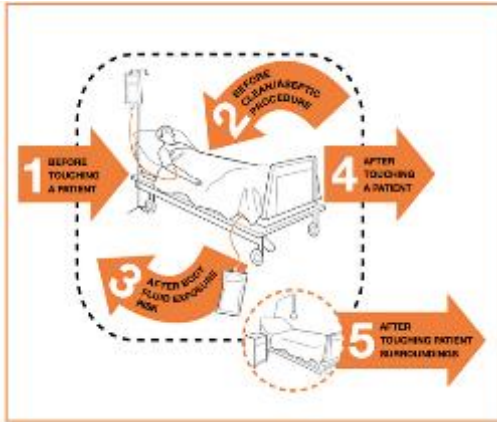
Interim guidance
5 June 2020



[https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)

Mask	What: Type of mask	Who: Masks should be used for	Where: Settings
Medical mask		<ul style="list-style-type: none"> • Health workers 	<ul style="list-style-type: none"> • Health care settings within the clinical areas
		<p>People caring for suspect or confirmed cases of COVID-19 outside of health facilities</p>	<ul style="list-style-type: none"> • Home settings with a sick person
		<p>Anyone with symptoms suggestive of COVID-19</p>	<ul style="list-style-type: none"> • Any setting in the community
		<p>People aged 60 or over</p> <p>People with underlying health conditions</p>	<ul style="list-style-type: none"> • Public settings where physical distancing cannot be maintained
Non-medical mask Aka Fabric mask		<ul style="list-style-type: none"> • People in the general public in areas with no or limited capacity to implement control measures, incl physical distancing of at least 1m • People on crowded transports 	<ul style="list-style-type: none"> • Public settings • Workplaces • Bus, metro, etc

IPC online training options



[How to put on and remove personal protective equipment \(PPE\)](#)

[Show course details](#) [Enroll me for this course](#)



[Infection Prevention and Control \(IPC\) for Novel Coronavirus \(COVID-19\)](#)

[Show course details](#) [Enroll me for this course](#)

<https://openwho.org/>

Resources for COVID-19

IPC documents

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control>

<https://www.who.int/infection-prevention/publications/en/>

https://apps.who.int/iris/bitstream/handle/10665/331695/WHO-2019-nCov-IPC_PPE_use-2020.3-eng.pdf

[https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-\(2019-ncov\)-outbreak](https://www.who.int/publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak)

Questions and Answers

<https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

If you cannot find an answer you can email our general IPC email with your question: **WHEIPC@who.int**



Thank You!

